

SEED COLLECTION FOR STATE NURSERIES

SPECIES	SEED CROP FREQUENCY	TIME TO SCOUT	LOOK FOR DURING SCOUTING	TIME OF COLLECTION	SEED SHAPE AND APPEARANCE	LOOK FOR AT COLLECTION	COLLECT METHOD	CLEANING	STORAGE	COMMENTS
ASH, BLACK	1-3 YEARS	JULY-SEPT	GREEN SAMARA CLUSTERS	OCT-JAN	FLAT-EXCLAMATION POINT-TWISTED	BROWN TO TAN SAMARA CLUSTERS BEST IF COLLECTED JUST AFTER LEAF FALL	H,T/S,P	SEPARATE SEEDS FROM STEMS	DRY TO 30% - STORE IN MOISTURE PROOF CONTAINER AT 20F	HANGS ON IN BUNCHES WELL INTO DECEMBER
ASH, WHITE	3-5 YEARS	JULY-SEPT	GREEN TO YELLOW SAMARA CLUSTERS	LATE SEPT- LATE NOV	FLAT WING, ROUND RICE SHAPED SEED- EXCLAMATION POINT- NO NOTCH ON WING	BROWN TO TAN SAMARA CLUSTERS- CAN HAVE A PURPLE CAST	H,T/S,P	SEPARATE SEEDS FROM STEMS-CAN REMOVE WINGS WITH SOME EQUIPMENT	DRY TO 7% - STORE IN MOISTURE PROOF CONTAINER AT 20F	DIFFICULT TO TELL FROM GREEN ASH - PURPLE LEAVES ONLY SURE WAY
ASH, GREEN	1 YEAR	JULY-SEPT	GREEN TO YELLOW SAMARA CLUSTERS	OCT-JAN	FLAT WING-RICE SHAPED SEED- EXCLAMATION POINT- SOMETIMES NOTCHED WING	BROWN TO TAN SAMARA CLUSTERS	H,T/S,P	SEPARATE SEEDS FROM STEMS-CAN REMOVE WINGS WITH SOME EQUIPMENT	DRY TO 7% - STORE IN MOISTURE PROOF CONTAINER AT 20F	CAN BE LOCATED NEAR RIVERS AND IN WET AREAS-CAN HAVE VERY POOR TO GOOD TIMBER QUALITY
ASPEN	1 YEAR 4-5 YEARS	MAY/JUNE	CATKINS/COTTON	LATE MAY TO EARLY JUNE	PEPPER SIZE SEED IN A WAD OF LOOSE COTTON	WINDROWS OF COTTON WITH PARTIALLY OPEN CATKINS	RAKE,BLOW/ VAC,PICK	REMOVE COTTON FROM SEED ON A VIBRATING SCREEN	DRY TO 5%-STORE IN MOISTURE PROOF CONTAINER AT 41F OR LOWER	TREMBLING AND BIG TOOTH ASPEN PRODUCE SEED AT DIFFERENT TIMES - moisture cements cotton
BASSWOOD	1+ YEARS	LATE JUNE/JULY	FRAGRANT YELLOW FLOWERS	SEPT-DEC	BROWN PEAS WITH PROPELLERS ON A STALK	BROWN PEAS WITH PROPELLERS ON A STALK	RAKE, T/S,H	CRUSH STEMS AND WINGS-SEPARATE HARD ROUND SEED	DRY TO 10%-STORE IN MOISTURE PROOF CONTAINER AT 40F OR LOWER	GERMINATES SECOND YEAR AFTER SOWING-MAY GERMINATE IN ONE YEAR IF PICKED IN SEPTEMBER
BEECH	4-5 YEARS	JULY	GREEN PRICKLY BURS	SEPT-NOV	NUT-15mm LONG- BROWN	NUTS ON THE GROUND BURS IN THE TREE CANOPY	H,RAKE	IF NECESSARY DRY BURS AND SEPARATE NUTS	SHOULD NOT STORE	RODENTS AND OTHER WILDLIFE LIKE THESE NUTS
BIRCH, YELLOW	2 YEARS	JULY	GREEN CONE-LIKE STROBILES ON BRANCH ENDS	SEPT-OCT	SMALL PIECES OF OATMEAL WITH A FLAT SEED IN THE CENTER	BROWN STROBILES - PARTIALLY OPEN	H	CRUSH STROBILES/SCREEN TRASH/GRAVITY TABLE	DRY TO 3%-STORE AT 36F	VERY LIGHT SEED-DIFFICULT TO SEPARATE STROBILE PARTS-25-50% GERMINATION RATE
BUTTERNUT	2-3 YEARS	JULY	SMALL GREEN NUTS	SEPT-OCT	GREEN FOOTBALL SHAPED - 3" LONG	NUTS IN TREES AND ON GROUND	PICK	BEST PLANTED WITH GREEN HUSK ATTACHED	NONE	HUSKS ROT EASILY-NUTS VERY MESSY TO HANDLE-RODENTS WAIT UNDER THE TREES FOR NUTS TO FALL
CHERRY, BLACK	1-5 YEARS	JUNE	GREEN FRUIT	AUG-SEPT	GREEN TO PURPLE/BLACK FRUIT	PURPLE/BLACK FRUIT IN ACCESSIBLE LOCATION IN QUANTITIES SUFFICIENT TO PICK	PICK,H,T/S	MASTICATE SOFT FRUIT,SEPARATE HARD PIT, DRY	DRY TO 5%-STORE IN MOISTURE PROOF CONTAINER AT 20F	SHOULD TRY TO COLLECT SEED FROM HIGH QUALITY TREES-CAN BE CONFUSED WITH CHOKE CHERRY
HEMLOCK	1-3 YEARS	JULY	GREEN CONES AT THE VERY ENDS OF THE BRANCHES	SEPT-NOV	VERY SMALL SEED WITH A WING	CONES JUST BEGINNING TO TURN BROWN-SQUIRREL CUT CONES SCATTERED UNDER TREES	H	HEAT CONES TO OPEN - SEPARATE SEED FROM WINGS AND TRASH	DRY TO 6% - STORE IN MOISTURE PROOF CONTAINERS AT 20F	RATHER SMALL CONES SCATTERED ACROSS THE CROWN OF THE TREE - GETS RIPE AND DROPS SEED SUDDENLY - SHORT PICKING WINDOW
HICKORY, SHAGBARK	1-3 YEARS	JULY	GREEN NUTS IN TREE CANOPY	SEPT-OCT	ALMOST ROUND GREEN/BROWN HUSKED NUT	NUTS UNDER TREES- AREAS WITH SHORT GRASS	RAKE, BAN, PICK	REMOVE HUSKS	KEEP COOL,SHADED AND DRY	PASTURE TREES PRODUCE WELL WITH LESS SQUIRREL COMPETITION

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MAPLE, HARD	3-7 YEARS	JULY	GREEN SEEDS IN TREE CROWNS - ABORTED SEED ON THE GROUND	LATE SEPT- EARLY NOV	GREEN TO YELLOW TO BROWN - USUALLY DOUBLES BEST WHEN WINGS START TO DRY	CHECK ACTIVE TIMBER SALES - CUT SEEDS TO SEE % OF DEVELOPED EMBRYOS - SHOULD BE 40% OR MORE	H, T/S, RAKE	MACHINE CLEANING WILL REMOVE WING AND ALLOW SEPERATION OF HOLLOW-GOOD SEED	DRY TO 12%-STORE IN MOISTURE PROOF CONTAINER AT 20F	ONE BUSHEL PER MAN PER DAY GOOD FOR HAND PICKING CUT TREES - TARP/SHAKE GOOD ON LAWN TREES AFTER LEAVES FALL IF SEED IS STILL PRESENT
MAPLE, SILVER	1 YEAR	MAY	GREEN SEEDS IN TREE CROWNS - ABORTED SEED ON THE GROUND	JUNE	GREEN TO BROWN - USUALLY SINGLES WHEN DROPPED	LARGE OPEN GROWN TREES - LOTS OF SEED	RAKE	REMOVE STEMS AND LEAVES - CAN BREAK OFF WINGS	PLANT ASAP IN EARLY SUMMER	CAN NOT BE STORED FROM YEAR TO YEAR
OAK, BURR	2-3 YEARS	JULY	ACORNS IN THE TREE CANOPY	AUG-SEPT	CAP ALMOST ENCLOSSES ACORN - FURRY APPEARANCE ON EDGE OF CAP	OPEN GROWN TREES OR TREES WITH FLAT UNOBSTRUCTED GROUND BENEATH - LOTS OF ACORNS ON GROUND	RAKE, BAN, PICK	HAND SORT	NONE	FURRY CAPS STAY ON THE ACORN - RACE WITH SQUIRRELS AND DEER FOR ACORNS
OAK, RED	3-5 YEARS	JULY	ACORNS IN THE TREE CANOPY	SEPT-EARLY OCT	REDDISH BROWN ACORN WITH NO STRIPES	NO WORM HOLES OR ATTACHED CAPS - ACORNS ON GROUND IN LARGE NUMBERS	RAKE, BAN, PICK	FLOAT, HAND SORT	NONE	RACE WITH SQUIRRELS AND DEER FOR ACORNS - WORMS WILL COME OUT DURING STORAGE
OAK,WHITE	4-10 YEARS	JULY	ACORNS IN THE TREE CANOPY	LATE AUG-SEPT	TAN TO LIGHT BROWN ACORN - THINNER AND SMALLER THAN MOST RED OAK ACORNS	NO WORM HOLES OR ATTACHED CAPS - ACORNS ON GROUND IN LARGE NUMBERS	RAKE, BAN, PICK	FLOAT, HAND SORT	NONE	RACE WITH SQUIRRELS AND DEER FOR ACORNS-WILL SEND OUT A ROOT SOON AFTER FALLING-QUALITY DECLINES RAPIDLY
OAK, SWAMP WHITE	3-5 YEARS	JULY	ACORNS IN THE TREE CANOPY	SEPT-EARLY OCT	TAN TO LIGHT BROWN ACORN - THINNER AND SMALLER THAN MOST RED OAK ACORNS	NO WORM HOLES OR ATTACHED CAPS - ACORNS ON GROUND IN LARGE NUMBERS	RAKE, BAN, PICK	FLOAT, HAND SORT	NONE	RACE WITH SQUIRRELS AND DEER FOR ACORNS
PINE, JACK	3-4 YEARS	SEPT/OCT	GREEN,GRAY, OR BROWN CONES IN TREES	OCT FOR "CONES OF THE YEAR"-ALL YEAR FOR OLDER CLOSED CONES	SMALL BLACK SEED WITH A WING	CLOSED BROWN AND GRAY CONES	H, SQUIRREL CASHES	HEAT CONES TO OPEN - SEPARATE SEED FROM WINGS AND TRASH	DRY TO 6% - STORE IN MOISTURE PROOF CONTAINERS AT 20F	GRAY CONES CAN REMAIN CLOSED FOR YEARS AND ARE STILL GOOD - DIFFICULT TO PICK BY HAND FROM TOPS
PINE, RED	3-7 YEARS	JUNE - AUGUST	LOTS OF GREEN CONES IN TREES	SEPT-OCT	MODERATE SIZE BROWN SEED WITH A WING	CONE TURNING PURPLE TO BROWN BUT NOT YET OPEN	H, SQUIRREL CASHES	HEAT CONES TO OPEN - SEPARATE SEED FROM WINGS AND TRASH	DRY TO 6% - STORE IN MOISTURE PROOF CONTAINERS AT 20F	DIFFICULT TO PICK FROM TOPS - WILL OPEN IF LEFT IN A WARM PLACE - RELATIVELY SHORT PICKING WINDOW
PINE, WHITE	3-10 YEARS	JUNE - AUGUST	GREEN CONES IN TREE CANOPY NEAR BRANCH ENDS 2 TO 6 INCHES LONG	SEPT-EARLY OCT	BB SIZE SEED WITH A WING	CONES TURNING YELLOW TO BROWN	H, SQUIRREL CASHES	HEAT CONES TO OPEN - SEPARATE SEED FROM WINGS AND TRASH	DRY TO 6% - STORE IN MOISTURE PROOF CONTAINERS AT 20F	TWO YEAR CONE - DEVELOPS IN CLUSTERS - VERY PITCHY - RELATIVELY SHORT PICKING WINDOW

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SPRUCE, BLACK	2-4 YEARS	JUNE	PURPLE OR GREEN CONES IN BUNCHES NEAR TREE TOPS	LATE AUGUST-SEPT	SMALL BLACK SEED WITH A WING	CONES PURPLE STARTING TO TURN BROWN AND OPEN ON SOME TREES-USUALLY FOUND IN SWAMPS OR SWAMP EDGES	H, SQUIRREL CASHES	HEAT CONES TO OPEN - SEPARATE SEED FROM WINGS AND TRASH	DRY TO 6% - STORE IN MOISTURE PROOF CONTAINERS AT 20F	SMALL CONE - SOME ARE PITCHY -SOME OPEN WHILE OTHERS IN SAME STAND ARE GREEN - MAY BE DIFFICULT TO STRIP FROM TREE - SHORT WINDOW
SPRUCE, WHITE	2-6 YEARS	JUNE	GREEN CONES IN BUNCHES NEAR TREE TOPS	LATE AUGUST-SEPT	SMALL BLACK SEED WITH A WING	CONES LIGHT GREEN TO YELLOW WITH SOME BROWN	H	HEAT CONES TO OPEN - SEPARATE SEED FROM WINGS AND TRASH	DRY TO 6% - STORE IN MOISTURE PROOF CONTAINERS AT 20F	ALL SEED USED BY STATE NURSERIES IS PICKED BY NURSERY PERSONNEL FROM SEED ORCHARDS - VERY SHORT PICKING WINDOW
TAMARACK	3-6 YEARS	JUNE	SMALL GREEN TO BRIGHT PURPLE CONES IN CANOPY	FIRST WEEK IN AUGUST	SMALL BLACK SEED WITH A WING	CONES TURNING YELLOW TO BROWN	H	HEAT CONES TO OPEN - SEPARATE SEED FROM WINGS AND TRASH	DRY TO 6% - STORE IN MOISTURE PROOF CONTAINERS AT 20F	VERY SMALL CONE - USUALLY SOME OLD CONES PRESENT - GOOD TREE WILL YIELD ABOUT ONE BUSHEL OF CONES -VERY SHORT PICKING WINDOW
BLACK WALNUT	2-3 YEARS	JULY	NUTS IN TREES	OCT	GOLF BALL SIZE ROUND NUT WITH A FIRM HUSK	LOTS OF NUTS ON THE GROUND	PICK, BAN, RAKE	REMOVE HUSKS	NONE	LARGE NUT WITH THICK GREEN HUSK THAT SHOULD BE REMOVED BEFORE PLANTING

HARVEST METHODS

- H - HAND PICK FROM CUT OR STANDING TREES
- T/S - TARP GROUND AND SHAKE BRANCHES WHEN SEED IS READY TO FALL
- P - PRUNING HOOK ON A LONG POLE
- B-A-N - BAG-A-NUT MACHINE
- RAKE - RAKE FALLEN SEED FROM STREETS OR LAWNS
- BLOW - BACK PACK BLOWER
- VAC - BACK PACK VACUUM OR SHOP VAC
- PICK - GATHER FALLEN SEED OR NUTS BY HAND FROM THE GROUND
- SQUIRREL CASHES - CONES OR SEED COLLECTED BY SQUIRRELS FOR A WINTER FOOD SOURCE, USUALLY RED SQUIRRELS AND SOMETIMES MICE

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by Gordon Christians - Hayward State Nursery Superintendent
Source information for this chart:
"Seeds of Woody Plants in the United States" USDA handbook No. 450
Personal experience of author and other nursery managers